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### SECTOR 3 — CHART INFORMATION

## SECTOR 3

### SOUTHERN MOLUCCAS—BURU, SERAM ISLAND, AND KEPULAUAN BANDA

**Plan.**—This sector describes Buru, Seram Island, their off-lying islands, and Kepulauan Banda, in that order.

#### General Remarks

**3.1** Seram (Ceram) Sea is the broad and deep passage bounded on the N by Kepulauan Sula and Pulau Obi, and the islands stretching then to Pulau Kofiau; on the S it is bounded by Buru Island and Seram Island. With the exception of Karang Bais (Leeuwarden Reef), off the NE point of Seram Island, there are no dangers outside the 200m curve. Tidal currents will be encountered close to the shores of the surrounding islands, but in the more open sections of the passage, monsoon drifts prevail. In the vicinity of Karang Bais, a constant E current has been observed.

**Winds—Weather.**—The monsoons in the Seram sea are not quite so well developed here as in the seas to the W and S. The E monsoon especially is of relatively short duration, and only moderately well developed.

In January the prevailing winds are NW. They blow with fair regularity, with an average velocity of about 6 knots. There is little change in February. The W monsoon weakens in March. In April the winds become variable, and in May the E monsoon sets in with winds most often from the SE, but with little constancy.

The E monsoon continues to be rather poorly developed through June, but in July, August, and September it is fairly well established with SE winds a half to two-thirds of the time. The average velocity then is about 9 to 10 knots. It becomes weaker in October and ceases by November, when the winds are quite variable again, more often SE than any other direction.

During December, the W monsoon becomes established with NW winds of fair regularity and moderate force.

Locally the direction of the wind is much affected by islands, in some places the land and sea breezes dominate. This is especially true in the vicinity of Seram.

In the open sea, showery weather occurs frequently during most of the year, but less often from August to November.

Haze is observed at all seasons, but is most pronounced in August and October.

The character of the weather on the islands depends largely upon the exposure to the monsoons; the S coast has its best weather during the W monsoon.

**Buru** (3°25'S., 126°40'E.) is the third largest of the Molucca Islands and has the appearance of one large irregular-shaped mass of mountains when seen from a considerable distance in any direction. Namlea Plain is a large valley in the E part of the island. The summits of the mountains are not easily distinguished from a distance; the higher peaks are often hidden by clouds. The mountains are further described with the coasts. The island is fringed by a reef in many places, but there are depths of 183m close to the coast nearly everywhere.

**Winds—Weather.**—The weather conditions on the N and S sides of Buru Island differ widely. On the N coast the NNW monsoon brings rain while the SSE monsoon is accompanied by a dry spell. On the S coast the reverse is true. During the latter part of the turning period in the fall and during December and January strong W or S winds and rain storms may spring up suddenly, but they last only a few hours; they cause a heavy sea.

#### North Coast of Buru

**3.2** Coastwise navigation along this coast is safe because there are no detached dangers outside the 20m curve which is close inshore.

**Tanjung Karbau** (Tanjung Karbou) (3°17'S., 127°07'E.), the N entrance point of Teluk Kayeli, is exhibited by a light, and further described in paragraph 3.9.

**Djikoe Merasa** (Jikumerasa) (3°10'S., 127°02'E.) lies about 8.5 miles NE of Tanjung Karbau. Good anchorage, out of the tidal current, may be obtained here; local knowledge is necessary. This anchorage is unsafe during the SE monsoon. **Terwissie** (3°13'S., 127°02'E.), a 355m high treeless mountain, stands 2.5 miles SSE of Djikoe Merasa, with a commanding hill, 194m high and with a tree on it, 2.25 miles SE. All other hills in this vicinity are sparsely covered with trees.

Good anchorage, out of the tidal current, may also be obtained in Teluk Waeplau, about 9 miles ENE of Djikoe Merasa. Local knowledge is necessary; this anchorage is unsafe during the SE monsoon.

From Teluk Waepluto **Tanjung Hatawanu** (3°04'S., 126°47'E.), 7 miles ENE, the coast is a stretch of sandy beach in back of which a plain rises gradually to the foothills of the higher interior mountains. The foothills are covered with light-green vegetation.

Between Tanjung Hatawanu and **Tanjung Wapoti** (3°04'S., 126°41'E.), 6 miles W, the coast is in great contrast to the above stretch. It is rather high, steep, and rocky, and a spur of the mountains approaches it. The highest point is a 621m summit about 3 miles ESE of Tanjung Wapoti. East of this spur, and separated from its steep E side by a gap, is a rather high plain.

Between Tanjung Wapoti and **Tanjung Bebek** (3°06'S., 126°18'E.), 24 miles to the W, the coast is sandy beaches backed by plains which rise to light-green foothills. Wai Nibe, the only river of any importance on this coast is 5 miles W of Tanjung Wapoti. The very dark 911m peak E of the river is easily distinguished from the other summits. The 1,458m peak 11 miles SE of Tanjung Bebek has the appearance of a large block when seen from the N and the NE and as the summit of the ridge from farther W. South of Tanjung Bebek a spur of the mountains extends in a N direction and has two sets of steep triple summits, each on a N-S line.

At **Teluk Bara** (3°10'S., 126°13'E.), entered between Tanjung Bebek and Tanjung Palpetu (Tanjung Palpetoe), about 12 miles E, the mountains come close to the coast, so the

coastal plain is considerably narrower. When seen from the N, the range S of the bay has a number of conspicuous points.

**Kapalatmada** (3°16'S., 126°12'E.), the highest peak, 2,429m high and about 12 miles SSW of Tanjung Bebek, is fairly sharp and is the highest peak on the island. The next peak to the W is 2,215m high and flat-topped. The 2,059m peak W of the latter has a rounded summit. Gunung Tomahu (Tomahoe), the W most of the higher peaks, has a double top, 2,161m and 2,109m high; the E summit resembles a horn with the point to the W. The 731m peak W of Gunung Tomahu is a sharp, well-wooded cone. A high spur with three conspicuous summits, 702, 352, and 255m high, extends from Gunung Tamahu to Tanjung Palpetu.

**Tides—Currents.**—The tidal currents set either E or W along the coast. The greatest velocity on record is 2.5 knots. The W current draws inward somewhat at Teluk Bara. Nothing is known as to the relationship between the turning periods of the vertical and horizontal tidal movements.

The lowest LW level occurs in June and December. The maximum rise and fall that can be expected are, respectively, about 0.5m above and about 1.0m below mean sea level.

**Anchorage.**—A number of villages are scattered along the N coast, but, with the exception of Teluk Bara, the bottom is too steep for suitable anchorage during the SSE monsoon.

Teluk Bara affords anchorage during the SSE monsoon, but during the NNW monsoon high seas and a surf will be experienced. In the E part of the bay is the small village of Kampung Bara inhabited by people from Halmahera and Kepulauan Sula.

## West Coast of Buru

**3.3** A wide berth should be given to the N part of this coast, which is foul up to 1.25 miles offshore. Between Tanjung Waeken and Tanjung Waflia, about 4 and 6 miles, respectively, SW of Tanjung Palpetu, three small but conspicuous hills stand near the coast. The N one is partly bare and the middle one entirely bare. Tanjung Waflia is low and covered with coconut trees. Near Tomahu Islands, where the mountains come close to the coast, the coast is especially high. The conspicuous peak of Gunung Tomahu resembles a cone. The hilly peninsula of Fogi, from which a light is exhibited from the summit, is located farther to the S. It is an excellent place for landfall.

South of Fogi peninsula the rocky coast gives way to sandy beaches. There are no conspicuous summits among the mountains, but in back of **Tanjung Sarmana** (3°25'S., 126°02'E.) and **Tanjung Walimen** (3°29'S., 126°05'E.) the heavily-wooded terrain rises rapidly. **Tanjung Walwawat** (3°37'S., 126°11'E.) is the S point of a wide stretch of lowland, through which the river Wai Koema flows. The muddy waters of this river discolor the sea water for a long distance offshore.

Strong currents set in a N or S direction along this coast. With continuous winds in the SSE monsoon there is usually a high running sea and rollers from the S.

**Anchorage.**—The channel between Buru and **Pulau Tengah** (3°14'S., 126°00'E.) offers excellent anchorage in depths of 24 to 39m over mud and sand. Outside the 10m curve, which is close to the shores, the depth in most places is more than 20m. A 3m patch lies 1.2 miles from the S point of

Tengah in the middle of the fairway and a 9.1m shoal lies 0.4 mile E of the same point. There are also several rocks beLW in this approach. In the middle of the broader section N of the latter spot is a 16.4m shoal. The only settlement of any importance is located at the N end of Pulau Tengah; near it is a small and steep beach. The anchorage near the village is in a depth of 29m. Local knowledge is essential.

The channel N of Pulau Tomahu can only be used by small vessels.

The channel between Pulau Tengah and Pulau Tomahu is the preferred entrance for large vessels. The drying reefs are clearly marked here, while the S entrance is encumbered with several submerged rocks with a depth of 0.9m. The tidal currents inside Tomahu Islands are weak. In the N entrance to the channel between Pulau Tomahu and the coast and between Pulau Tomahu and Pulau Tengah a vessel approaching from the outside is soon clear of the tidal current which sets across the entrances.

Off the village of Kampung Fogi, about 2 miles S of Fogi Peninsula there is suitable anchorage for a small vessel when the reefs can be made out.

Close off a coconut plantation at **Kampung Wamsasi** (3°33'S., 126°10'E.) anchorage may found in the open roadstead, 0.3 mile offshore, in a depth of about 15m, fine black sand, good holding ground; this is the only anchorage free from rollers during the SSE monsoon.

## South Coast of Buru

**3.4** Southeast of **Tanjung Walwawat** (3°38'S., 126°12'E.) there are many detached dangers. A shoal of 9m is located 3 miles ESE of Tanjung Walwawat. Shoals with least depths of 7.8 and 11.9m are 1.5 miles and 3 miles SSW and SE, respectively of Tanjung Fatufat (Fatoefat). Off the coast of Bobo, just NW of **Tanjung Fatufat** (3°40'S., 126°17'E.), is a rock awash and a 5.9m shoal. A 3.9m shoal and a long drying reef are off the coast between Teluk Tifu (Tifoe) and Teluk Leksula (Leksoela). The most conspicuous section of this coast is the Plain of Mala, which extends into the interior of the island. Here the sea is discolored for miles offshore by the muddy waters of the river Wai Mala. The hills and mountains lie close to the coast on either side of this plain. Sanane, the 296m hill on the W side of the entrance to Teluk Tifu, is especially conspicuous. With favorable weather anchorage is available almost anywhere between Tanjung Walwawat and Teluk Leksula, over a sandy bottom.

Tidal currents can be fairly strong along this coast.

**Teluk Tifu** (Tifoe) (3°43'S., 126°24'E.), 13 miles SE of Tanjung Walwawat affords anchorage free from rollers, heavy seas, and currents but it is only large enough for one vessel. Because of the narrow entrance and the rollers and currents in front of it during the SSE monsoon, it is sometimes impossible to enter. During this monsoon, however, it is advisable, when possible, to enter early in the morning and depart as early as possible, because the wind increases as the day advances.

Pulau Ketjil is on the N side of the E end of the bay. Kampung Tifu, with a pier, lies on the S side.

**Signals.**—A flag is displayed at the flagstaff on the E entrance point when it is inadvisable to enter; a red flag is displayed when there is already a vessel in the bay.

**Directions.**—A vessel should approach the entrance at a low speed and enter with only sufficient speed for steerage way. When Pulau Ketjil bears 060°, it should be steered for on that bearing, then let go the starboard anchor when the point on the NW shore, about 0.3 mile W of the head of the pier at Kampung Tifu bears not less than 270°, or when the pierhead bears about 094°, veering out about 49m of cable; after swinging, a hawser should be laid out to a tree on Pulau Ketjil.

**Kampung Tifu** (3°43'S., 126°24'E.) (World Port Index No. 52750) is on a sloping beach on the E side of Teluk Tifu. There is a pier for boats. Vessels call here occasionally.

**Tides—Currents.**—At Teluk Tifu the highest HW level occurs in March and September and the lowest in June and December. The maximum rise and fall of tide that can be expected are, respectively, 0.6m above and 0.7m below mean sea level.

A shoal, depth not known and position approximate, and another, depth not known and existence doubtful, are 19 and 36 miles, respectively, S of Teluk Tifu.

A shoal with a depth of 3.9m is 3 miles SE of Teluk Tifu about 0.3 mile offshore. About 2 miles SE of this shoal and 0.5 mile offshore there is a drying reef marked by discoloration.

**Teluk Leksula** (Leksoela) (3°47'S., 126°31'E.), 8 miles SE of Teluk Tifu, is easily recognized by its two entrance points, Tanjung Kabat Roit and Tanjung Kabat Ha, with the small rocky islets in the channel between them. Midden Islet, at the middle of the entrance, has the appearance of a flat cylinder. Of the coast mountains, Mefa, 565m high, Miten, and Tef Dula are fairly conspicuous. Batu (Batoe) Kapal, lying 2.5 miles ESE of Tanjung Kabat Roit, is a rock that forms a good mark for making the entrance to Leksula Bay. This rock is at the S end of a reef extending about 1 mile offshore.

A light, shown only when vessels are expected, is shown from the NE side of the bay.

**3.5 Kampung Leksula** (Leksoela) (3°47'S., 126°31'E.) (World Port Index No. 52740) is at the foot of hills, near a small bight in the drying reef at the head of the bay. There is a landing pier with a depth of 1.8m alongside.

Anchorage can be found in 35m over mud in the middle of the bay. During the SSE monsoon anchorage should be somewhat farther to the E in 20.1m. During the NNW monsoon anchorage should be more to the NW in 28m. There are no currents in the bay.

**Anchorage.**—Near the village of Kampung Nalbesi, about 3 miles E of Teluk Leksula, and near the village of Kampung Wanala 6.5 miles farther ESE, anchorage can be found during favorable weather conditions. This is outside the strength of the tidal currents and local knowledge is necessary.

**Directions.**—With the bay well open steer for Midden Islet on a NNE course until the light bears 038°, which will lead through the channel between Midden Islet and the detached reef, 0.2 mile SE of this islet.

Between Teluk Leksula and **Tanjung Batupekat** (Batoepekat) (3°51'S., 126°44'E.), the S extremity of Buru, about 14 miles to the E the coast is very similar in character to the coast NW of the bay. The high rocky point **Tanjung Batutulis** (3°50'S., 126°37'E.) is the most conspicuous point E of Batu Kapal. Between Teluk Leksula and Tanjung Batutulis are shoals ranging from depths of 0.9 to 7.8m and coral reefs extending as far as 2 miles offshore. The vicinity of Teluk

Namrole is especially conspicuous because of the valley of the river Wai Tina, the 49m high rocky walls of Tanjung Batupekat, and the small rocky islet of Klasi. Close inland of Teluk Namrole are the Wa Leli Mountains, a range of hills with an elevation up to 553m.

**3.6 Teluk Namrole** (3°51'S., 126°43'E.) has a white coral reef, Loktonal, at the middle of its entrance; the reef dries at LW. A rather strong current has been observed in the deep channel between Klasi and the shore. There is no shore reef in front of the village of Kampung Namrole, on the NW side of the bay. A small hill, round and flat, is near the shore E of the village and is conspicuous because of its lighter color. To enter the bay, steer N for the 553m summit of the Wa Leli Mountains. If the summit is obscured by clouds, a useful alternate mark, on the same bearing, is a large round-topped tree, which, on nearer approach, will be seen between two native houses in the village. Anchorage will be found in 29m, over sand and coral, in Teluk Namrole.

**Directions.**—Approach the bay with the summit of Wai Leli bearing 000° and in line with Namrole village; if the summit is obscured a useful alternative mark, on the same bearing, is a large round-topped tree which, on near approach, is seen between two houses in the village. Pass W of Loktonal on this leading line then steer for a white patch about 0.5 mile SW of Wai Leli summit in line with a prominent knob on the ridge behind it bearing 340°; this leads to the anchorage.

Between Tanjung Batupekat and **Tanjung Liboli** (3°41'S., 127°11'E.), the SE extremity of Buru, about 30 miles NE, the coast is backed by a mountain range parallel to the coast. The highest point of the range is Kaku Batakual (Batak Boeal), a 1,731m peak 10 miles N of Tanjung Liboli. The summits of this range are almost always hidden by the clouds.

Between Tanjung Batupekat and Tanjung Salia, 14 miles to the ENE, the coast is fronted by a barrier reef with a number of deep openings through it. Shoals, with least depths of 4.1 to 7.7m, are located as far as 3 miles offshore. Behind this barrier reef, anchorage can be found almost anywhere, over a sandy bottom.

Labuan Kabuti, on the NE side of Tanjung Salia, affords suitable anchorage during the NW monsoon in a depth of 42m. At Tanjung Polisini, 9.5 miles farther NE, there is anchorage in 50 to 61m, close W of the mouth of Wai Lumara.

**Pulau Oki** (3°49'S., 126°51'E.), an islet, 149m high and covered with vegetation, is about 1 mile offshore, about 7 miles ENE of Tanjung Batupekat. Some rocks are close S of the islet. Wayo (Wajio) Reefs with a least depth of 4m lie with the shallowest part 2 miles ESE of Pulau Oki. The islet is reported to be a good radar target up to a distance of 22 miles.

The 617m and 670m summits N of Tanjung Salia are good marks. On both sides of Tanjung Salia there is an almost continuous line of sandy beaches with plains between them and the hills. At Tanjung Liboli, the coast becomes rocky again.

**Tides—Currents.**—The tidal currents set parallel with the coast. Eddies are experienced off Tanjung Salia, and between Tanjung Liboli and Pulau Ambelau, an island described in paragraph 3.8. These whirlpools are created by the E current

through the passage meeting the S current in Selat Manipa. During the W monsoon there is sometimes a strong drift setting E in this passage and W during the E monsoon.

**Oki Roads** (3°48'S., 126°51'E.), N of the islet of the same name, is best entered by passing close E of that islet. If bound to the W from the roads pass between the islet and the 4.9m coral patch N of it. Vessels proceeding E through the inner channel should favor the coast N of Wayo (Wajio) Reef and Belobo Reef; the latter has a drying spot on the N side. Kampung Oki, on Buru, N of Pulau Oki, is the most important settlement on this coast.

**3.7 Pulau Ambelau** (3°51'S., 127°12'E.) is 8.5 miles S of Tanjung Liboli and is separated from Buru by a deep and clear passage. It rises almost vertically from the sea, and may be approached close-to as far as depths are concerned. The entire island is wooded and very hilly. The highest summits, Nona, 559m, and Baula, 608m, are on the W part of the islet. At Waloa, on the S coast, and at Nigeri Baru and Ulima (Uilima) on the N coast, sandy beaches and the only flat land on the island is found. Native canoes may find suitable anchorage in the small bay at Waloa; otherwise no anchorage has been found anywhere.

Pulau Ambelau is a good radar target up to a distance of 22 miles.

## East Coast of Buru

**3.8** Between Tanjung Liboli and **Teluk Kayeli** (Kajeli Bay) (3°19'S., 127°07'E.), Buru is composed of high and wild mountainous land with mountain spurs extending close up to the coast and forming rocky points in places. Between these points are sandy beaches and the coast slopes more gently. At Tanjung Pohonrea, 8 miles NNE of Tanjung Liboli, there is a small round coastal hill, 157m high which is very conspicuous. Teluk Kayeli, described below, can easily be identified by approaching vessels, because this bay, together with the Plain of Namlea to the W, appear as a large break in the mountainous country.

**Tides—Currents.**—Tidal currents are strong along this coast; the maximum velocity of the N and NW current was observed to be 3 knots five days after new moon; the maximum velocity of the SE and S current was about 1 knot.

**Anchorage.**—During the SE monsoon the E coast S of Teluk Kayeli is absolutely not approachable. During the NW monsoon fairly suitable anchorage may be found in the following places:

In the bight at **Kampung Ilat** (3°35'S., 127°15'E.), 7 miles NNE of Tanjung Liboli, small vessels can anchor in 50 to 70m out of the strength of the current, but it is attended with some difficulty. When approaching steer 270° for a small isolated house close N of the village and in the middle of the shore of the bay. A stream is a little S of this house. When at anchorage Pulau Ambelau is out of sight behind the land S of the anchorage. In calm weather anchorage is available farther S nearer Kampung Ilat in depths of 35 to 40m.

Close N of **Kampung Batujungkoar** (Batoedjoenko) (3°26'S., 127°15'E.) there is a point with some detached rocks in the shallows off it. A suitable anchorage in 21m is available about 183m NE of these rocks.

**Teluk Kayeli** (3°19'S., 127°07'E.), on the NE side of Buru, is 4.5 miles wide between the two low entrance points Tanjung Waat and Tanjung Karbau. A light is exhibited at an elevation of 14m from Tanjung Karbau. The land at these points rises immediately to the hills in back of them; this and the low, marshy inner shore, backed by the Plain of Namlea, make it easy to recognize. There is little or no current in the bay.

The river Wai (Wa) Apu, discharging at the head of the bay, gives a dirty gray muddy color to the waters of the bay, especially after heavy rains. The river has been navigated by a motorboat for a considerable distance above the mouth. A least depth of 3m was reported and the width varied from about 80 to 100m. The rate of the stream was estimated at from 3 to 4 knots.

**Kayeli Roads** (3°22'S., 127°07'E.), in the S part of Teluk Kayeli, is in a spacious bight with suitable anchorage in depths of 35 to 40m, over mud and sand. When entering near HW the drying reef on the E side of the bight should be given a wide berth. On the S part of this reef are the islets Pulau Besar and Pulau Kecil.

**Namlea Roads** (3°16'S., 127°05'E.), in the N part of Teluk Kayeli, has irregular depths and a number of dangers, most of which front the shore abreast of the village on the NE side. It is free from rollers at all times but is encumbered by shoals some of which are marked by beacons.

**Kampung Namlea** (3°17'S., 127°06'E.) (World Port Index No. 52760) is the residence of a government official. There is a boat pier with a depth of 1.8m at its head. Lighters unload and load cargo on the beach. A mosque NW of the pier is prominent from seaward. A light, shown only when vessels are expected, is shown from the head of the boat pier.

The entrance of the channel leading to the inner roads is marked by two beacons 0.35 mile W of the pierhead. A pole beacon marks a 5.5m shoal about 1.75 miles W of the pier.

**Tides—Currents.**—At Namlea Roads the lowest LW level occurs in May and June, and in November and December. The maximum rise and fall of tide that can be expected are, respectively, about 0.4m above and 0.8m below mean sea level.

**Anchorage.**—The usual anchorage is about 0.5 mile WSW from the head of the pier at Kampung Namlea. This anchorage has a depth of 20.1m, but a 3.9m shoal and a 2.4m shoal are N and SW, respectively, from it. A deep channel used by small craft and lighters leads from the anchorage to the beach. There is no difficulty in the approach to the roads, but the N entrance point to Teluk Kayeli should not be rounded too closely because of 0.3m depths close to the point.

## Selat Manipa

**3.9 Selat Manipa** (3°20'S., 127°22'E.), between Buru and Pulau Manipa, about 14 miles E, is a wide, clear deep-sea passage connecting Seram Sea with Banda Sea. It is much used by vessels passing through this region. During continuous winds, which cause a high sea in the strait, small vessels give preference to Selat Kelang, discussed in paragraph 3.11, even though the current may be almost as strong there as in Selat Manipa.

**Tides—Currents.**—Strong currents flow through Selat Manipa, but they are more or less influenced by the monsoon drifts. Strong tide rips were reported mid-channel in the strait.

**Pulau Manipa** (3°19'S., 127°34'E.), about 14 miles E of Buru, is mountainous and rises to a height of 632m at Kala Huhun. On the S side is a narrow plain on which are several villages where most of the island's inhabitants live. There are hardly any plantations. A large coastal reef, on which are the islands Masawoi and Asamamonuke (Asamamonoeke), extends from the N end of Pulau Manipa. Other islands near Pulau Manipa are Pulau Suanggi (Soeanggi), Tuban (Toeban) and Luhu. The channel between Pulau Suanggi and Pulau Manipa is clear; the channel between Pulau Manipa and the large reef on which Tuban lies can be navigated with due care.

**Suanggi Island Light** (3°18'S., 127°28'E.) is shown from a 21m white iron framework structure on the summit of the island. It is irregular during strong winds. The island is a good radar target at a distance of up to 26 miles.

Anchorage can be found on the S, W, and NE coasts. Anchoring on the NE coast is not recommended, however, because strong tidal currents strike this coast from the N. A current with a velocity of 5 to 6 knots has been observed by a vessel anchored NW of Tanjung Samala, the SE point of the island. Tidal streams with rates of 5 to 6 knots have also been observed in the strait off Tanjung Saniani, the W point of Pulau Kelang.

The best anchorage at Pulau Manipa is off the NW coast is in **Reede Hayasa** (Hajasa) (3°17'S., 127°31'E.) which is entered between Tanjung Hapale and Tanjung Hakuluane (Hakoeloeano). The head of this bight is encumbered with drying reefs and shoals. Anchorage is in 16.4 to 46m and shelter is fair during the SE monsoon.

## Selat Kelang

**3.10 Selat Kelang** (3°16'S., 127°39'E.), between Pulau Manipa and Pulau Kelang, has a least navigable width of 4 miles and is deep and clear. The points of the islands forming it can easily be recognized even at night. The tidal currents are very strong making it advisable to maintain a mid-channel course if navigating the passage at night. The maximum rate of tidal current of from 5 to 6 knots has been observed in the strait off Tanjung Saniani, the W extremity of Pulau Kelang and off Tanjung Samala, the SE extremity of Pulau Manipa.

**Pulau Kelang** (3°12'S., 127°44'E.), NE of Pulau Manipa, is mountainous; its highest peak, **Tonu** (3°13'S., 127°45'E.), is 828m high and is an old volcano. Kampung Sole, on the NE side, is the largest village. Fishermen may be encountered all around the island.

**Tanjung Saniani** (3°14'S., 127°38'E.), the W extremity of Pulau Kelang, has a mosque with a conspicuous silver-colored dome standing on its S side.

**Anchorage.**—Suitable anchorage can be found at the N end of the island W of Tanjung Batugoso except during strong continuous winds during the NW monsoon. On the S coast there is anchorage near Kampung Pamariki, 2.5 miles W of the SE end of the island. On the E coast are several anchorages N of the parallel of the mountain, Tonu.

**Pulau Babi** (3°10'S., 127°48'E.), off the NE side of Pulau Kelang, is comparatively low. It is separated from Pulau

Kelang by Lobang Sole, a narrow strait which cannot be recommended as a passage because of strong currents which cause eddies.

**Lobang Haja** (3°09'S., 127°50'E.), the narrow strait between Pulau Babi and Tanjung Haja, on Seram, can be navigated by small vessels with local knowledge and draft no greater than 3.3m. The currents attain a maximum rate of 6 knots and local knowledge is necessary. Shoals, with depths of 2.7m and 3.6m, are 0.6 and 0.4 mile, respectively, S of Tanjung Haja.

**Directions.**—Vessels approaching Lobang Haja from S should steer 015° for Tanjung Haja passing W of the shoals mentioned above. Then come to 357° to pass about 91m W of Tanjung Haja, then continue on that course past the point and through the strait.

## Selat Boano

**3.11 Selat Boano** (3°00'S., 128°00'E.), between Pulau Boano and the NW coast of Seram, is a good passage but tidal currents will be experienced within it. When approaching from NE, Tanjung Tanduru Besar (Tandoeroe Besar), the NW point of Seram, is a conspicuous landmark. Tide rips may be seen off the NE end of Pulau Boano. When passing through the strait favor the E side of Pulau Boano because it is steep-to. On the NE side of Boano, N of Tanjung Pamali, shoals with depths of 2.8m and 5.9m, extend about 1 and 1.5 miles offshore, respectively.

**Pulau Boano** (2°58'S., 127°55'E.), 8.5 miles NE of Pulau Kelang, is mountainous over its SW part. The highest point is a conspicuous 624m conical summit. The NE part of the island is a low plateau, not over 59m high. The pointed SW end of the island is rocky and very conspicuous. In contrast to the E and SE sides of the island, many shoals and reefs front the NW side. Because the bottom on the NW side is also very irregular, it is advisable to keep at least 3 miles off, considering also that the currents are also irregular.

**Pua** (Poea) (2°56'S., 127°54'E.), an island 403m high, is close off the NW side of Pulau Boano. The passage between the two is obstructed by reefs. A 10.9m shoal and a 1.4m shoal are 2 miles NW and 1.5 miles NNW, respectively, of the SE point of Pua.

Several dangers lie off the W sides of Pua and Boano; this coast should not be approached within 3 miles.

A light is exhibited at an elevation of 60m from Pulau Niene.

Pulau Boano is rocky and infertile, and sparsely inhabited. There are no inhabitants on the N and NW part of the island.

## Seram (Ceram)

**3.12 Seram** is about 185 miles long and has irregular mountains over its entire length. Its highest point, in about the middle of the island, is **Gunung Binaiya** (Binaija) (3°10'S., 129°27'E.), 3,055m high. Except for a few coastal reefs projecting from Seram and nearby islands, vessels can navigate close to the shore.

Earthquakes occur often, more so on the S coast than on the N coast. Mud volcanoes are found in the vicinity of **Kampung Bula** (Boela) (3°09'S., 130°28'E.) on the NE coast. Although violent tremors have been recorded, there have been no decided volcanic eruptions.

**Winds—Weather.**—The rainy season on the N coast occurs during the NW monsoon and the dry season during the SE monsoon. The reverse is true for the S coast. That part of Seram forming the W side of **Teluk Piru** (Piroe) (3°21'S., 128°10'E.) is subject to the same conditions as the N coast because the high mountains of Ambon catch the moisture carried by the SE monsoon. Land and sea breezes will be experienced on both the N and S coasts.

## West Coast of Seram

**3.13** The W side of Seram, as seen from the coast, appears as a rising, hilly and mountainous territory, wood-covered with no conspicuous summits. The W coast of Hoalmoal Peninsula between Tanjung Sial and Tanjung Haja, can be approached close-to because the 10m curve is close to the shore. The only other known dangers, other than the two shoals S of Tanjung Haja (discussed in paragraph 3.11), are an 8.7m shoal about 2.5 miles NNW of Tanjung Sial, and a rock awash about 0.2 mile S of the same point. The points along this stretch of coast are easily recognized. It is sparsely populated; the only village of any importance is **Kampung Supe** (3°13'S., 127°52'E.), abreast of Pulau Kelang. A strong current sets around Tanjung Sial. Otherwise there is not much of a current along the coast until the channels on either side of Pulau Babi are reached.

Between Tanjung Haja and **Tanjung Tanduru Besar** (2°52'S., 128°10'E.) the NW coast of the island has several inlets and is generally hard to approach because of the many islets and dangers. The hills are close to the coast in many places, but E of **Pulau Marsegu** (Marsegoe) (3°00'S., 128°03'E.) and at the villages of Kampung Kotana, Kampung Kawa, and Kampung Lawawu, the shores of the bay are marshy and covered with mangrove trees. The only coast hills that are of value as landmarks are N of **Asaudi** (3°08'S., 127°56'E.).

**3.14 Asaudi Roads** (3°08'S., 127°56'E.), 6.5 miles ENE of Tanjung Haja, is safe during both monsoons. The best anchorage is in 39m, over mud and sand, S of the 76m island of Asaudi and 0.65 mile from the shore abreast of the village.

**Teluk Kotania** (3°03'S., 128°02'E.) is not navigable in its inner part because of numerous reefs. Only small vessels with local knowledge can find their way to the village at the head of the bay. Anchorage can be obtained in 40 to 50m, sand, in the outer part of the bay W of the alignment of the E extremity of Pulau Marsegu (Marsegoe) and Tanjung Wantebu bearing 021°.

The bay E of Pulau Marsegu is clear outside the shore reef and may be preferred to Teluk Kotania. The depths are great but anchorage may be found in 40 to 55m off the E side of Pulau Marsegu or near the N edge of a drying reef extending from the point E of that island. The best anchorage is in about 37m in the NE corner of the bay abreast of the mouth of the river **Wai Tosu** (2°58'S., 128°07'E.).

**Kawa Roads** (2°56'S., 128°08'E.) provides suitable anchorage, during the SE monsoon, in 29m, off the village of Kampung Kawa, which is 6 miles NE of Pulau Masegu, and with the small rocky islet of Sirih, 3.5 miles SW of Tanjung Tanduru Besar, bearing 347°. At this place the bottom consists

of mud, sand and stones. In general, good holding ground may be found in almost any depth. The bottom inside the 10m curve rises steeply to the sandy beach.

## North Coast of Seram

**3.15** The N coast of Seram is not much frequented by shipping. Navigation along this coast, however, is not difficult because there are no dangers beyond 0.5 mile offshore except at Teluk Wahai, Teluk Sawai (Seleman Bay), and Kepulauan Tudjuh. Furthermore, the 20m curve is not more than about 1 mile offshore for practically the entire coast.

Between **Tanjung Tanduru Besar** (2°52'S., 128°10'E.) and Kepulauan Tudjuh, about 50 miles E, the coast is deep and clear. The mountains and hills are close to the sea at many places and at intervals there small valleys with streams and coconut plantations. There are several coastal villages. Many of the hills and mountains are easily identified. The most conspicuous are **Little Dromedaris** (2°52'S., 128°34'E.) and **Great Dromedaris** (2°52'S., 128°32'E.), 473m and 697m high, respectively, which are near the middle of this stretch of coast. Nakaela, farther to the W, is 793m high and has a flat top. Cecelia Mountains, SE of Little Dromedaris, attain a height of 1,354m and are somewhat conspicuous. Lumute (Loemoete) Mountains, farther to the ESE, is one continuous range, 914 to 1,372m high. Tanjung Tanduru Besar, the NW point of Seram, is particularly conspicuous because of the high land which rises abruptly from the sea. Towile Bubui, 1,125m high, 16 miles ESE of Tanjung Tanduru Besar and Sarusi, 1,171m high, 37 miles ESE of the same point are reported to be easily identifiable from N at 45 miles.

**Tides—Currents.**—The current along the coast is very weak; farther off the monsoon drifts prevail. When in the vicinity of Tanjung Tanduru Besar remember that tidal currents set in and out of Selat Boano. No currents have been reported in the vicinity of Kepulauan Tujuh (Poelau Toedjoeh). Countercurrents prevail close inshore on the N coast of Seram during the SE monsoon.

**Anchorage.**—Between Tanjung Tanduru Besar and **Tanjung Kalawai** (2°51'S., 128°15'E.), 6 miles E, anchorage is out of the question. Then to **Tanjung Hanua** (Hanoea) (2°52'S., 128°21'E.), 5.5 miles farther E, there is anchorage close to the shore near the mouths of the streams. Then E to Kepulauan Tujuh anchorage can generally be found near the points, although very close to the shore in some cases. It is inadvisable to anchor with a shore line because the currents are too strong. These anchorages are only temporary.

At **Kampung Noniali** (2°52'S., 128°24'E.), 2.5 miles E of Tanjung Hanua, there is temporary anchorage in 55m 180m offshore.

West of **Tanjung Lamana** (2°50'S., 128°31'E.), 9 miles E of Tanjung Hanua, there is temporary anchorage in 42m, over coral and sand, about 0.3 mile from the drying shore reef.

North of **Tanjung Uli** (Oeli) (2°50'S., 128°40'E.), 10 miles farther to the E, there is temporary anchorage in 55m over coral and sand 0.25 mile offshore.

At Kampung Sukaradja, 3 miles SE of Tanjung Uli, there is temporary anchorage in 37m over sand, with 190m Rapapine Hill bearing 192°.

North of **Tanjung Makina** (2°51'S., 128°45'E.), 5.5 miles E of Tanjung Uli, there is anchorage in 55m over coral and sand, about 0.3 mile offshore.

Off Kampung Lisabata, 7.5 miles farther E, there is anchorage in 37m E of the mouth of the river Wai Ela and about 0.1 mile offshore.

**Tides—Currents.—Kampung Taniwel** (2°51'S., 128°28'E.), 19 miles E of Tanduru Besar, the lowest LW occurs in May and November. The maximum rise and fall of tide that can be expected are, respectively, about 0.5m above and 0.8m below mean sea level.

This tidal datum is applicable to the NW part of Seram and nearby islands from Selat Manipa to Teluk Sawai (Seleman Bay).

**3.16 Kepulauan Tujuh** (Poelau Toedjoeh) (2°45'S., 129°01'E.), off the W entrance point to Teluk Sawai (Seleman Bay), are six partly-inhabited islands which have been cleared for coconut plantations. A large conspicuous tree is on Pulau Besar, the NW and largest island. **Telegraaf Reef** (2°48'S., 128°56'E.), a 2.7m shoal 4 miles SW of Pulau Besar, and the shore reefs are well-marked by discoloration. **Lasi** (2°48'S., 129°01'E.), a drying reef of coral and mud, 4.5 miles E of Telegraaf Reef, is generally not marked by discoloration at HW. The best channel through the group, night or day, is between the islands of Tengah and Air. Air lies 2.5 miles SSE of Pulau Besar and has a drying reef extending 1 mile off the S coast.

A depth, 4.9m, is about 0.5 mile SSW of Tengah. A shoal with a depth of 9.1m is 2.2 miles N of Tengah.

**Directions.**—The islands of Kepulauan Tujuh are difficult to distinguish at night from the W approach because the islands blend in with the high Seram Coast. The islands can be safely approached from E on a clear night.

**3.17 Teluk Sawai** (Seleman Bay) (2°51'S., 129°12'E.), SE of Kepulauan Tujuh is 19 miles wide between the low points **Tanjung Namaa** (2°47'S., 129°03'E.) and **Tanjung Pamali** (2°48'S., 129°22'E.). At the head of the bay the mountains come very close to the shore; this is particularly true at and W of the peninsula on which the 180m **Olat Hill** (2°56'S., 129°12'E.) is located. Two low mangrove-covered islets, **Radja** (2°55'S., 129°10'E.) and **Sawai** (2°55'S., 129°11'E.), are on a large drying reef off the end of the peninsula. Bare limestone rocks rise vertically out of the sea at **Tanjung Hatu Supun** (2°57'S., 129°10'E.), 2 miles W of Olat Hill. Somewhat farther to the W, pyramidal **Lusiala Hill** (2°57'S., 129°06'E.) rises to a height of 440m. The first conspicuous mark to be made out is Saka, a blunt top, 1,492m high, directly S of Lusiala Hill. Two miles E of Saka are two other peaks on an approximate N-S line and are 1,658m and 1,925m high. Sapolewa, a 214m hill near the SE side of the bay is also very conspicuous.

**Anchorage.**—Excellent anchorage can be found almost anywhere in the W part of Teluk Sawai. In **Paoni Roads** (2°52'S., 129°05'E.), 4.5 miles S of Tanjung Namaa, there are four detached reefs of 1.8 to 2.4m, which cannot be located by discoloration of the water because of the discharge of the streams in the vicinity. These reefs extend about 0.8 miles offshore. Only the N of several creeks N of the village of Paoni is accessible for boats, for a short distance.

**3.18 Campedak Bay** (2°54'S., 129°04'E.) is on the W side of Teluk Sawai S of Paoni Roads. The bay is about 0.25 mile wide and extends a little over 1 mile S of its entrance between Pulau Campedak (Tjampedak) and the shore E. There are general depths of 18.3 to 35m and, except for the fringing coastal reef, there are no off-lying dangers.

**Seleman Roads** (2°57'S., 129°07'E.), E and NE of Lusiala Hill, can be approached on a 206° course direct for the conspicuous mosque at the village. This course leads between two shoals of 4.9 and 9.1m and are not marked by discoloration of the water.

**Teluk Sawai** (2°57'S., 129°10'E.), on the SW side of the peninsula on which Olat Hill is located, is approached on the same course used for Seleman Roads. When Lusahita, a small islet on a drying reef N of Teluk Besi disappears behind the N end of Radja, one can head into the bay.

Teluk Besi, on the E side of the same peninsula, is partially obstructed by shoals and drying coral reefs fronting it. Two islets, Lusahiti and Lusaolot, covered with coconut trees, and Sialumaina, a sandbank covered with shrubs, are on the drying coral reef. The best entrance is along the E shore, but there is also a good channel W of Lusahiti, the W most of the islets, which can be used safely when the reefs are visible.

**3.19 Teluk Wahai** (2°47'S., 129°30'E.), 8 miles E of Tanjung Pamali, is an inlet in the drying coastal reef which affords anchorage in reasonable depths. There is no anchorage between Teluk Sawai (Seleman Bay) and Teluk Wahai. Approaching from N, Teluk Wahai is difficult to locate, but the metal roofs of the village on the rising ground are useful marks. **Pamali** (2°48'S., 129°30'E.), a 54m coastal hill E of the bay, is conspicuous.

**Aspect.**—The edges of the reef on the W side of the fairway are marked by two white iron beacons with ball topmarks and the E side by three black iron beacons with truncated cones as topmarks. A light is shown from a wooden post near the outer end of the pier at the village.

**Wahai** (2°48'S., 129°30'E.) (World Port Index No. 52660), a fairly large village, is built on rising ground in the S part of the bay. The villages of Hatuwu and Hatiling are to the E. Copra and jungle products are shipped from here. A pier, which can accommodate a vessel 50m long with a maximum draft of 3m, is located at the village.

**Anchorage.**—The W corner of the shed on the pier in range with the middle black beacon bearing 154°, leads safely through the entrance to the inlet. There is anchorage in depths of 45m. Larger vessels anchor just outside the entrance, W of an 11.9m shoal patch on the E side.

**3.20 Teluk Haitling** (2°48'S., 129°31'E.), 1 mile E of Teluk Wahai, is formed on its W side by Tanjung Hewal. This bay is more spacious than Teluk Wahai, but is seldom visited. A 6.7m shoal is just outside the entrance. Tanjung Hewal, which appears as an islet lying off the hilly land S, serves as a good mark, but care must be taken to avoid the 6.7m shoal and the drying reef E of the point.

Between Tanjung Hewal and **Tanjung Lama** (2°58'S., 130°21'E.), 52 miles to the E, the coast is backed by a broad rolling plain which rises gradually to the mountains of the

interior. The only conspicuous points are Tomo, the 407m hill 8 miles SW of Tanjung Hewal, and Talirin (Kapailoe), the double-topped hill 3.75 miles SE of Tanjung Lama; the summits of the latter hill are 249m and 271m high. The peaks of the higher mountains S of this coast can be seen from offshore, but they are closer to the S coast than the N.

The coastline is low and wooded and is fringed by a narrow and steep coastal reef with drying banks of mud and sand with occasional coral. The points which are covered with trees and bushes are conspicuous only when close inshore.

**Tides—Currents.**—Tidal currents close offshore are fairly strong. In depths over 180m, the monsoon drift may be experienced and in June a constant E current with a velocity of 1 knot has been observed off the NE extremity of Seram.

**Anchorage.**—Suitable anchorage can be found anywhere along this coast, but at the steeper places caution is necessary because of the currents. The best anchorages are found in the bights of the small villages of Kampung Pasahari, Kampung Seliha, and Kampung Bengoi, 8, 19, and 42 miles E, respectively, of Tanjung Hewal.

**Tanjung Lama** (2°58'S., 130°21'E.), the NE extremity of Seram, and **Tanjung Bobo** (2°59'S., 130°23'E.), about 2 miles ESE, are low and distinctive, with steep-to coastal banks of mud and sand. The bay formed between these points affords sheltered anchorage during the SE monsoon, in a depth of 7m, NNE of the mosque in Kampung Hoti, at the head of the bight.

**Karang Bais** (Leeuwarden Reef) (2°55'S., 130°26'E.), 6 miles NE of Tanjung Lama, is a drying reef on a small oval-shaped bank with depths of less than 183m; it is steep-to and marked by discoloration. There are no other dangers around it.

## East Coast of Seram

**3.21** The E coast of Seram trends generally SSE for 62 miles from **Tanjung Lama** (2°58'S., 130°21'E.) to the SE extremity of the island. Vessels navigating off this coast will find the two islands, Pulau Parang and Pulau Madorang, useful landmarks. The conspicuous summits of the mountains will be described below with the detailed description of the coast. The tidal current off the E coast of Seram sets N or NE with a rising tide and in the opposite direction with the falling tide. It is believed that a combination of both monsoon drifts and tidal currents will be encountered off this side of the island.

The part of the coast between Tanjung Lama and **Tanjung Ilor** (3°25'S., 130°48'E.), 35 miles E, is alternately hilly land and low plains. The most conspicuous are: **Talirin** (3°02'S., 130°23'E.) 271m high, and S of Tanjung Lama; the 489m Boela Hill, S of the bay of the same name; the two 134m and 149m hills on the W side of Teluk Waru; the 118m hill farther to the NW; and the 98m hill, **Keli Dukun** (3°25'S., 130°44'E.) on the S side of Teluk Waru. The most conspicuous summits farther inland are Serawantufa (Serawantoeffa), 513m high, SW of Teluk Ingelas, and **Keli Badir** (3°29'S., 130°43'E.), the steep 295m hill S of Keli Dukun. Between these last two are several other peaks; the central group are the Waelila Mountains, of which the 806m SE summit is more conspicuous than the 921m NW summit. There are many streams along this stretch of coast.

The narrow drying bank along the coast consists of mud and sand and is steep-to. Outside this bank it is deep and clear, except for the S side of Teluk Waru and reefs, extending 1 mile offshore, with a least depth of 6.8m, running along the coast 3.5 miles SE of Tanjung Lama. Between Tanjung Bolifar and Tanjung Nif, coastal reefs, with a least depth of 0.9m, extend up to 0.75 mile offshore.

**3.22 Teluk Ingelas** (3°03'S., 130°27'E.), 7 miles SE of Tanjung Lama, is spacious and clear; the shores are low but rise close within and are bordered by a narrow steep-to bank of mud and sand. Suitable anchorage with good holding ground is found in 11.9 to 12.8m 0.3 mile offshore. The anchorage can be approached on a 220° bearing on the summit of Serawantufa. A bank of mud and sand projects from **Tanjung Sisal** (3°04'S., 130°27'E.), the S entrance point. During the SE monsoon the bay is well sheltered, and even during the NW monsoon it is more protected than Teluk Bula.

**Teluk Bula** (Teluk Boela) (3°06'S., 130°30'E.), 11 miles SE of Tanjung Lama, is a bight forming an open roadstead with anchorage in depths of less than 22m, soft mud. The shore of the bay is low with hilly land behind it. This bay affords shelter in the SE monsoon, but high seas may be experienced in the NW monsoon. Vessels do not normally anchor because the holding ground in Teluk Ingelas is preferred.

**Kampung Bula** (3°06'S., 130°30'E.) (World Port Index No. 52680), a village in the S part of Teluk Bula, is a petroleum shipping port.

A stone pier at the village is about 503m long and has the hulk of a ship moored end-on to its head. A vessel berths close off the hulk with lines secured to piles on the inshore side and to hauling-off buoys on the port bow and quarter. The berth will accommodate vessels up to 168m long with a draft of 10.1m.

Another pier extends about 0.3 mile N from an oil depot close E of the stone pier.

A flagstaff stands near the root of the pier.

Anchorage may be obtained in a depth of about 21.9m, soft mud, with the pierhead bearing 174°, distant 0.2 mile. A vessel approaching from S or E should steer for Serawantufa until the pier is identified. It is suggested that only a daylight approach be made due to lack of navigational aids. The holding ground is not as stiff as in Teluk Ingelas.

**Tides—Currents.**—The lowest LW level occurs in May or June and in November or December. The maximum rise and fall that can be expected are, respectively, 0.6m above and 0.9m below mean sea level.

**3.23 Waru Roads** (Waroe Roads) (3°24'S., 130°40'E.), 20 miles SSE of Teluk Bula, is at the head of Teluk Waru, a large indentation in the coast. East of the roads the muddy shore bank changes to coral reefs which dry in places. The roads afford safe anchorage at all seasons in 29m over mud. The village of Kampung Waru (Waroe), built on the shore, has a pier for boats but it cannot be approached at LW. A stranded wreck is close offshore 3.5 miles NNW of Kampung Waru.

**Pulau Parang** (3°19'S., 130°47'E.), an island NE of Teluk Waru and N of Tanjung Ilor, is separated from Seram by a clear channel with a depth of more than 183m. It is 138m high and has a rather broad flat summit. The island is fringed with

several detached and fringing reefs which dry, and generally the depths in the immediate vicinity of the island are very irregular.

Between **Tanjung Ilor** (3°24'S., 130°48'E.) and the SE extremity of Seram the coast is rather low. The N part of this section is backed by a low plain through which the river Wai Masiwang flows, but along the S and greater part the hills rise a short distance inland. About 12 miles S of Tanjung Ilor is a 516m summit which is more or less conspicuous. Gunung Selagor, a somewhat detached mountain 793m high, is 18.5 miles S of Tanjung Ilor and is particularly conspicuous when seen from E. Of the group of mountains 3.5 miles farther SSE, **Suru** (3°46'S., 130°46'E.) is 723m high and has a steep E side, and **Tunlean** (3°47'S., 130°46'E.) is 689m high and has a very steep side.

**3.24** The bight between **Tanjung Masiwang** (3°27'S., 130°50'E.) and **Tanjung Danama** (3°35'S., 130°53'E.), 3.25 and 11.5 miles respectively, S of Tanjung Ilor, has many dangers inside the 20m curve. A reef, Karang Ulin, is within the 20m curve and lies 0.75 mile E of Tanjung Masiwang. Pulau Akat, low and covered with coconut trees, and a large tree near the shore at the middle of the bight are conspicuous from seaward. South of Pulau Akat, a channel leads to a limited anchorage off Kampung Air Kasar where there are depths of 8m. A boat pier with a depth of 2.4m is at Kampung Air Kasar.

With the exception of a 3.9m patch 1 mile S of Tanjung Danama, the coast S of that point is clear and steep-to as far as the bight at **Kampung Arnanan** (3°50'S., 130°49'E.), NW of the SE point of Seram. Two detached shoals with a least depth of 0.4m are in this bight. This coast is covered with coconut trees as far S as Tanjung Kopeng Watu, the only rocky point on this stretch; S of this point are mangroves. Only temporary anchorage can be found along this coast during the NW monsoon, and the depths are great. Except in the bight at Kampung Arnanan, where anchorage is also possible during the E monsoon, one cannot escape the currents.

At **Kampung Kilgah** (3°38'S., 130°52'E.), 2 miles S of Tanjung Danama there is a small inlet in the drying shore reef which has depths of 10.9m and can be used by boats. Between this village and Tanjung Kopeng Watu there is no coastal reef, but sloping sandy beaches are found at several places.

**Pulau Madorang** (3°39'S., 131°04'E.), a small islet 11.5 miles ESE of Tanjung Danama, is on the SW side of a drying reef which has very steep sides, but is on a bank with less than 183m. The islet is low but is covered with fairly tall trees.

There are no other dangers in the vicinity.

The E part of the S coast of Seram will be described beginning in paragraph 3.36.

## Ambon Island and the Uliasers

**3.25** Ambon and the three islands, Pulau Haruku (Haroeke), Pulau Saparua (Saparoea), and Nusa Laut (Noesa Laoet), collectively known as the Uliasers are separated from Seram by Selat Ceram. They are all high and hilly and when seen from S appear as part of Seram. The passage between the islands and Seram is safe, but a wide berth should be given to the S side because of the reefs that project from Pulau Saparua and Pulau

Haruku. These islands are mountainous and earthquakes occur, although no volcanic eruptions have been known. The most recent earthquake occurred in 1950; the previous one in 1898 caused great devastation in the port of Ambon.

## Ambon Island

**3.26 Ambon Island** (3°37'S., 128°10'E.), the W most and largest of the group, is almost divided into two parts, Hitoe Peninsula and Laitimor Peninsula, which are connected only by a low sandy isthmus; Hitoe Peninsula, the N part is the largest. **Salahutu** (3°33'S., 128°15'E.), a 1,060m double-topped peak is at the NE end of Hitoe Peninsula and is the highest and most conspicuous point. Numerous spurs with lower tops extend from this peak; the most conspicuous is **Setan** (3°31'S., 128°14'E.) near the N coast which rises to a sharp point, 564m high. At the SE end and entirely separated from Salahutu are three very conspicuous peaks of which Huwe, 368m high, is the highest. On the W side of Hitoe Peninsula are many peaks, but because of their similarity in shape and height they are not easily distinguished from each other.

Laitimor Peninsula, the S part of Ambon Island, is not as high as the N part. **Horiel** (3°43'S., 128°14'E.), the highest point, is 581m high and has a fairly flat top. Suwal (Soewal), 5.25 miles farther to the SW, is 344m high and is conspicuous because of a group of trees on its summit.

Ambon Island gives a good radar return at a distance of 27 miles.

**Teluk Ambon** (Baai van Amboina) (3°43'S., 128°07'E.) is a large inlet, lying between the two peninsulas of Ambon described above. The entrance, open to the SW, is between Tanjung Alang and Tanjung Nusanive.

**Tanjung Alang** (3°46'S., 128°00'E.), the W entrance point of Teluk Ambon, rises steeply out of the water and can be approached close-to. The point is reported to be a good radar target up to a distance of 22 miles. A white cross is reported to be conspicuous at the village of Lilibooi, about 1.5 miles NE of Tanjung Alang.

**Tanjung Nusanive** (3°47'S., 128°05'E.), the E entrance point of Teluk Ambon, lies about 6 miles E of Tanjung Alang. The point also rises steeply out of the water and can be approached close-to. A light, from which a radiobeacon transmits, is shown from a white metal framework tower about 0.5 mile NE of the point. A radio mast stands on the 463m high summit 6 miles NE of Tanjung Nusanive. An airfield, with a white memorial monument at its NW end, lies on the N shore of Teluk Ambon, about 4.5 miles N of Tanjung Nusanive. A light is shown from a white metal framework tower on Tanjung Sikoela, about 1.25 miles SSW of the monument.

Teluk Ambon is very deep and, except for the upper end and the inner bay, the bottom is steep, so that anchorage can only be found close to the shore. The bay provides good shelter during both monsoons. An area off the SE side of the outer bay has been swept to depths of 18 and 15m, and an area off the NW side has been swept to a depth of 15m.

**Tides—Currents.**—During the NW monsoon a moderate current will generally be encountered close to Tanjung Alang; it sets to the N and follows the coast around to the N. A current may occasionally set out of the bay. Eddies occur around Tanjung Nusanive; a strong current may be encountered along the coast to the E.

**3.27 Ambon Roads** (3°42'S., 128°10'E.), off the town of Ambon (Amboina) on the SE side of Teluk Ambon and about 7.5 miles NE of Tanjung Nusanive, affords anchorage for vessels not exceeding 75m in length, in a depth of 46m off **New Victoria Fort** (3°41.3'S., 128°10.8'E.). The best anchorage in the roadstead, however, is reported to be off the **Coaling Wharf** (3°42.0'S., 128°09.7'E.) in depths of 50m.

**Pilotage.**—Pilotage is compulsory. The pilot boards about 1 mile W of Joos Sudarso Pier. The pilot boat is stationed in Teluk Ambon and can be requested by radio or by displaying the International Code Flag "G". A doctor boards with the pilot. Radio pratique cannot be obtained. Tugs are available.

The limits of the roadstead are a line drawn in a 236° direction from **Tanjung Batu Merah** (3°41'S., 128°11'E.) and the meridian 128°09'35"E.

Vessels are not permitted to enter or leave harbor between sunset and sunrise without permission of the local Naval Control Officer.

**Signals.**—Berthing and tidal signals are displayed from the flagstaff on **Joos Sudarso Pier** (3°41.6'S., 128°10.4'E.) as follows:

1. The signal "DB" indicates that a vessel should proceed to the anchorage.
2. The signal "A" plus the third substitute indicates that a vessel may proceed to Joos Sudarso Pier.
3. The signal "B" plus the third substitute indicates that a vessel may proceed to the Coaling Wharf.
4. The signal "C" plus the third substitute indicates that a vessel may proceed to Digul Pier.

The following signals are also displayed from the same flagstaff:

Signal	Meaning
Red flag (or white over red light)	Flood tide.
Blue flag (or red over white light)	Ebb tide.
White flag (or white light)	Slack water.

Storm signals are also displayed from the signal mast.

A light is shown from a position about 0.9 mile SW of the signal mast.

### **Ambon (Ambonia) (3°41'S., 128°10'E.)**

World Port Index No. 52720

**3.28** The town of Ambon lies 7.5 miles NE of Tanjung Nusanive, on the SE side of Teluk Ambon. The town is identifiable by a mosque with a cupola, not visible from all directions, standing 0.25 mile SE of **Joos Sudarso Pier** (3°41.5'S., 128°10.4'E.); a prominent landmark is the mosque in the village of Batu Merah, 1 mile NE. Main exports are spices and copra; main imports are cloth, ironware, canned goods, and timber.

**Winds—Weather.**—During the SE monsoon (May to September) sudden squalls are sometimes experienced; sea or swell is often considerable. The working of cargo is rarely affected except by heavy rains occasionally. The wettest months are May, June, and July.

From November to January, prevailing winds are from the E; from May to August, prevailing winds are from the W.

**Tides—Currents.**—At Ambon Roads the highest water level occurs in April or May, and in October or November, and the lowest in June and December. The maximum rise and fall of tide that can be expected are, respectively, 0.9m above and 1.0m below mean sea level. A current, setting in a SW or NE direction, may be experienced in the roads and at the piers; the direction and velocity, which seldom exceeds 1 knot, apparently depend on the wind. Because eddies are occasionally observed near the piers, the currents in the roads are not indicative of what to expect at the piers.

**Aspect.**—Joos Sudarso Pier, well protected by large rubber fenders, has a frontage of 450m long; a vessel with a maximum length of 187m, beam of 35m, and draft of 12m can be taken to berth. Berths designation are given by the distance measured from the SW corner of the pier. Vessels should have all anchors ready to be used when coming alongside.

Gudand Arang Wharf (Pertamina), a concrete and wooden jetty, 0.75 mile SW of Joos Sudarso Pier, is 65m long with a maximum depth of 5m at HWS; it is used by tankers. Vessels lie quietly here even with a considerable sea and swell in the bay. The wharf is connected by pipeline with 3 tanks a short distance S and is the main refueling wharf; vessels up to 10,000 dwt with a draft of 8m use the facility. General cargo is handled. An extension WNW was under construction.

Two mobile cranes are available of 1.5 and 2 tons capacity, and four forklift trucks of 3 tons capacity.

There is a port medical center and five hospitals. Deratting and Deratting Exemption certificates can be issued.

**Directions.**—A vessel approaching Ambon in the rainy season, with reduced visibility, will find it difficult to identify its features. Approaching from W, the high land in the vicinity of Tanjung Alang will be distinguished first. Coming from S or just E of Tanjung Nusanive, the light-green hill **Kapal** (3°47'S., 128°06'E.), 230m high and about 1.5 miles NE of the point, will appear as an islet in front of the high land of the NW shore of the bay.

It is recommended to approach the anchorage with the anchor lowered and with 46 to 55m of cable out.

**Caution.**—An obstruction lies at 0.25 mile NNW of the Joos Sudarso Pier. Piles uncovering at LW lie abreast from New Victoria Fort.

For pilotage, regulations, and landmarks along the bay, refer to paragraph 3.28.

Ambon Inner Harbor and its approaches, E of a line bearing 335° from **Kampung Batu Merah** (3°41'S., 128°11'E.), are closed to navigation.

The inner bay is entered by a narrow channel swept to depths of 7.9m and 7.0m over a least width of 137m. The inner bay is swept over a large area to a depth of 10.3m. Several villages are on the shores of the inner bay.

Lighted beacons lie 91m E and 0.3 mile SW of **Tanjung Martafons** (3°39'S., 128°12'E.).

Irian Wharf, a T-headed concrete pier 152m long with a depth of 11m alongside, which is used by the Indonesian Navy, is on the S shore of the inner bay 0.75 mile ENE of Tanjung Martafons.

**3.29 South coast of Laitimor Peninsula.**—The S coast of the Laitimor Peninsula is practically unapproachable during the SE monsoon. Teluk Seri is about 5 miles E of Tanjung

Nusanive. The small bight in front of Kampung Seri is clear, but the bottom is too steep for anchoring. There is no anchorage along the shore E of Teluk Seri. A conspicuous house with a light-colored roof is at Kampung Hutumuri, a village 13 miles ENE of Tanjung Nusanive.

**Teluk Baguala** (3°39'S., 128°17'E.), on the NE side of Laitimor Peninsula, is only safe as an anchorage during the NW monsoon. A shoal with a least depth of 2.1m is at the middle of the entrance, and other dangers are near the NE side of the entrance. The SW part of the entrance is clear. At the head of the bay and on the E side of the isthmus separating this bay from Ambon is the village of Kampung Paso.

**Caution.**—Teluk Seri and Teluk Baguala are still regarded as dangerous due to mines laid during 1941-1945. Due to the lapse of time the risk in this area to surface navigation is now considered no more dangerous than the ordinary risks of navigation, but a real risk exists with regard to anchoring, fishing, or any form of submarine or seabed activity.

See Pub. 120, Sailing Directions (Planning Guide) Pacific Ocean and Southeast Asia, for danger areas and locations of swept channels in Teluk Seri and Teluk Baguala.

**3.30 West coast of Hitoe Peninsula.**—The W and N coasts of Hitoe Peninsula can be approached close-to as far as depths are concerned. The W coast is more rocky than the N coast. Between Tanjung Alang and **Tanjung Wairole** (3°41'S., 127°55'E.), the W extremity of the island, about 7.5 miles to the NW, anchorage may be found in 70m close to the shore, but there is no shelter during either monsoon and the currents are strong. The Nusa Telu (Noesa Teloe) Islands, including the small islets of Nusa Lain, Nusa Hatala, and Nusa Ela, are off Tanjung Wairole; they are separated from that point and from each other by deep channels. These channels should not be used due to their narrowness and the sometimes strong currents.

**3.31 North coast of Ambon.**—More suitable places for anchorage are found on the N coast than on the W coast, even though the bottom is steep and the currents strong. Safe anchorage during both monsoons can be found off **Kampung Said** (3°35'S., 128°02'E.), 9 miles NE of Tanjung Wairole and close E of low Tanjung Hulung (Hoeloeng). In the roads the bottom consists of sand and stones and the depths decrease gradually to the shore, but outside the roads the bottom drops off steeply. A reef E of the road is usually marked by discoloration. The recommended anchorage is in 29 to 50m with a conspicuous stairway with low gray pillars bearing S and Nusa Ela in behind Tanjung Hulung. This anchorage is out of the currents.

There are no suitable anchorages W of Kampung Said nor E as far as **Kampung Hila** (3°35'S., 128°05'E.), but then E along the coast to **Kampung Hitu Lama** (Hitoe Lama) (3°35'S., 128°10'E.) there are several anchorages in 79 to 90m. To anchor at Kampung Hitu Lama, steer for the mosque on a 145° bearing until such depths are reached.

The only other possible anchorage is in front of **Kampung Liang** (3°30'S., 128°19'E.) which lies in the bight just W of Tanjung Honimua (Metiela), the NE point of the island. A reef

extends from this last point. Vessels anchoring at Kampung Liang should steer for the mosque, bearing S, until depths of 70 to 90m are reached.

**3.32 East coast of Ambon.**—A large bight with **Batu Duear** (Batoe Itam) (3°32'S., 128°21'E.) and **Batu Lompa** (3°35'S., 128°21'E.), two large rock formations, as its entrance points is on the E coast of Ambon.

**Caution.**—See Pub. 120, Sailing Directions (Planning Guide) Pacific Ocean and Southeast Asia, for danger areas off **Kampung Waai** (3°34'S., 128°19'E.). This area is still regarded as dangerous due to mines laid during the war of 1944-45.

## Selat Horuku

**3.33 Selat Horuku** (Selat Haroekoe) (3°35'S., 128°23'E.), between the island of Ambon and Pulau Horuku (Haroekoe), is easily navigated even at night. The most prominent features are the large rock formations, Batu Dua and Batu Lompa, previously mentioned, and a group of trees on the 333m mountain about 3.25 miles NNE of Tanjung Batu Kapal on the Pulau Horuku side. In the middle of the N entrance to the strait, Nusu Pombo is on a large drying reef. The channel W of this reef is preferred because a drying shoal patch is 1.5 miles ENE of Nusa Pombo.

**Tides—Currents.**—For tidal information see Ambon Roads, previously described in paragraph 3.29. The currents in Selat Horuku are tidal and set in a N or S direction with a maximum velocity of 1.5 knots. The currents are strongest near Tanjung Batu Kapal, the SW point of Pulau Horuku, and here as well as on both sides of the reef at Nusa Pombo, tide rips may be seen.

## Pulau Horuku

**3.34 Pulau Horuku** (Haroekoe) (3°34'S., 128°30'E.), E of the island of Ambon, is a hilly island which rises to a height of 601m at **Huruano** (3°35'S., 128°30'E.), the highest peak which is near the middle of the island. This peak has a rounded shape when seen from E or SE, and a conical shape when seen from the N and NW. The S coast is very steep where the mountain range from this peak extends to it. At Tanjung Waisu (Waisoi) Besar, near the middle of the S coast, are two conspicuous conical hills, and to the W is a high plateau. Close to Tanjung Batu Kapal, the SW point, is a high and wooded rock with the same name.

A light is exhibited on the NW coast of Pulau Horuku. About 7 miles to the SW, on Ambon, a light is exhibited at Waai from an elevation of 14m.

**Anchorage.**—Anchorage is available at Kampung Horuku, 2 miles NE of Tanjung Batu Kapal, in 50m, with the conspicuous high roof of the church bearing 100°.

Off Kampung Kabau, 3.25 miles farther N, there is a detached reef near the edge of which there is anchorage in 50m with the S most of three mosques bearing 169°.

On the N coast there is anchorage in 50 to 61m off Kampung Pelauw with the mosque in range with the summit of Huruano bearing 159°.

On the E coast temporary anchorage is available in a depth of 28m abreast of **Kampung Hulaliu** (3°33'S., 128°33'E.).

**Teluk Aboru** (Aboroe) (3°36'S., 128°31'E.), on the S coast about 1 mile NE of Tanjung Waisu Besar, affords anchorage in 29 to 70m with a white house bearing 332°. This anchorage is not safe during the SE monsoon. Off Kampung Wasu and Kampung Oma, farther to the W, the water is too deep for anchorage.

## Selat Saparua

**3.35 Selat Saparua** (Saparoea) (3°35'S., 128°35'E.), between Pulau Haruku and Pulau Saparua (Saparoea) is less than 0.5 mile wide in its narrowest part. It is easily navigated by day, but its use by night is not recommended. A midchannel course should be maintained through the passage. The shore reefs on either side of the narrow section is well marked by discoloration.

**Tides—Currents.**—The currents in the strait are tidal and set in a NW and SE direction with a maximum velocity of 3 knots. Tide rips have been observed in the bight NW of the narrows.

**Pulau Molana** (3°38'S., 128°36'E.), S of Teluk Saparua, is an uninhabited island 176m high. The sea bottom around it is too steep to afford anchorage and there are currents near it.

## Pulau Saparua

**Pulau Saparua** (Saparoea) (3°33'S., 128°40'E.) is hilly and has a more or less conspicuous gap across its narrowest part between the two large bays in its coast. The higher hills are very similar in shape, round or conical. **Takuku** (3°34'S., 128°37'E.), near the W coast, is the highest and rises to a height of 360m. Booi, the 324m hill near Tanjung Booi, the SW point of the island is particularly conspicuous. A small rocky islet is near this last point. Generally the coast is rocky, except in Teluk Tuhaha (Toehaha), the large bay on the N side, where the land is flat.

**Anchorage.—Teluk Haria** (3°35'S., 128°37'E.), an inlet on the W coast, affords anchorage, but a few rollers may be experienced during the NW monsoon. The church at Kampung Porto, on the N shore of the bay, is an excellent mark.

In Teluk Tuhaha, the large bay on the N side of the island, anchorage can be found almost anywhere near the shore free from dangers. A shore reef extends from the middle of the E shore and the N part of the W shore. A detached reef with two drying patches is off the latter shore. Vessels can anchor S of Kampung Nolot, near the NE point of the bay; N of here the currents are strong and variable. This end of the bay is thickly populated.

**Saparua Roads** (3°35'S., 128°40'E.) is at the head of the large bay on the S side of Pulau Saparua. Tanjung Ouw, the E entrance point, rises steeply to 50m. The W side of the bay is steep and has a narrow shore reef. The E side of the bay, NW of Kampung Ulat, has a broader shore reef and a shoal with a least depth of 31m is off of it. The middle of the bay is deep.

Vessels bound for the roads can steer 320° direct for the boat pier, which will lead clear of a 2.1m reef on the SW side of the

bay. This reef is marked by a beacon. Large vessels can then anchor near the 20m curve. A white tomb on the W shore is a conspicuous mark. The roads are calm except during the SE monsoon, when a swell may be experienced; communication with the shore, however, is never interrupted.

A light is shown from a flagstaff on the pierhead; however, this light is not reliable.

**Saparua** (3°35'S., 128°40'E.) (World Port Index No. 52710) has a boat pier with a depth of 0.3m alongside. Vessels call here regularly.

**Nusa Laut** (3°40'S., 128°47'E.), an islet 2.3 miles SE of Pulau Saparua, is separated from that island by a deep channel. Vessels using the channel should give the Pulau Saparua shore a berth of at least 0.33 mile and that of Nusa Laut of at least 0.55 mile. Nusa Laut rises to a height of 358m. A drying reef fringes the coasts.

**Teluk Nalahia** (3°38'S., 128°47'E.), a bay on the N side, affords the only anchorage in the island. Its shores are very hilly, and it is well sheltered during both monsoons. Vessels entering the bay should steer 196° for a gap in the hills and anchor in about 64m abreast of the high round point on which Kampung Nalahia is located. The village is 40m above sea level and is reached by a steep road.

## South Coast of Seram

**3.36 Teluk Piru** (Piroe Bay) (3°20'S., 128°10'E.), at the W end of the S side of Seram is a large bay, bounded on the W by the peninsula which terminates in Tanjung Sial, and fronted on the S by the Ambon Islands. The passage N of these islands is deep and clear. Tanjung Sial is a sharp point with a drying rock 0.15 mile S of it. Because of a strong current in the vicinity, it is advisable to give the point a wide berth.

A mountain range extends over the entire length of the peninsula forming the W side of Teluk Piru. Its highest point is Sahuia (Sahuai), a 1,059m peak 21.5 miles NNE of Tanjung Sial. The W shore of the bay is fringed by a narrow reef which is steep-to. **Tanjung Saala** (BatoeKapal) (3°22'S., 128°01'E.), 13.5 miles NE of Tanjung Sial, can be recognized by rock lying a few yards off.

**Anchorage.**—Anchorage can be found at many places along this shore. At **Kampung Luhu** (3°23'S., 127°58'E.) there is anchorage outside the detached reef in 40m over sand with the mosque bearing 250°. Another mosque is at Kampung Iha close S but it has a pointed roof while the one at Kampung Luhu has a round tin roof.

**Loki Roads** (3°17'S., 128°04'E.), in a bight formed by the coast reef 5 miles NE of Tanjung Saala, affords anchorage near the boat pier in a depth of 23m. When entering pass N of the reef marked by a beacon with a rectangle top-mark in the middle of the roads. The village maybe recognized by a church near the beach. Vessels call here occasionally. The reef on the S side of the entrance is also marked by a beacon.

The inner part of Teluk Piru is entered either E or W of **Pulau Kasa** (3°18'S., 128°09'E.), a flat but well-wooded islet on a drying reef 5 miles E of Loki Roads. A light is exhibited from the S end of the islet. **Pulau Babi** (3°13'S., 128°10'E.) is a 131m islet close to the E entrance point of the inner part of the bay. South of this islet and the shore to the E of it there is a

string of reefs which dry when the water is at its lowest level. Tetu, a drying reef marked by discoloration with a 2.3m patch close S of it, lies 2.75 miles NW of Pulau Babi. Several reefs with drying patches are 4.25 miles NW of Babi; **Sasadau** (3°10'S., 128°06'E.), the NW most is marked by an iron beacon with a white ball topmark. The reefs S of Pulau Babi are unmarked.

The points N of Pulau Babi are 61 to 152m high and are part of a group of hills of which **Huhula** (3°12'S., 128°12'E.), 643m high, is the highest peak. North of these hills a wide plain extends back from the E shore; this plain also runs back of the N shore, but is much narrower there. A reef extends from **Tanjung Sisi** (3°10'S., 128°10'E.), 3.5 miles N of Pulau Babi; a 5.5m shoal is close off **Tanjung Terua** (3°08'S., 128°11'E.), 5 miles NNE of Tanjung Babi.

Suitable anchorage may be found almost anywhere along the shores.

**Tides—Currents.**—The currents in the bay appear to be entirely dependent upon the winds and run in one side and out the other. A velocity of 1 knot has been reported in the vicinity of Pulau Kasa.

**Piru Roads** (3°04'S., 128°11'E.), at the head of Teluk Piru, is a small bight in the shore reef. The anchorage, described below, is in front of the entrance.

A reef that dries is a little less than 1 mile SSW of the pier at Piru. It is marked on the W side by a beacon with a white spherical topmark. A 9.1m shoal is about 0.2 mile WNW of the reef.

Approaching the roadstead, pass W of the 9.1m shoal and steer for the head of the pier on a bearing of 033° until 0.35 mile off it, then anchor in 29m off the reefs.

**Piru** (Piroe) (3°04'S., 128°11'E.) (World Port Index No. 52730) is on the shore abreast of the roads.

The bight NE of Pulau Kasa is not very much frequented. Along its N shore are several narrow inlets with drying reefs at their entrances. On the reef S of Teluk Latal, the W most and largest of these inlets, is a shoal which is always above water and on which a small tree stands. About 5 miles ENE of Tanjung Tutualmatwai (Toetoalmatwai), there is a conspicuous 412m hill with a single round-topped tree on it.

Temporary anchorage may be found at a few places close to the shore. The principal villages on the E shore are Kampung Waisamu, Kampung Hatusua, Kampung Kairatu, and Kampung Seruawan. A vessel reported to find good anchorage in 37m, good sandy holding ground, just W of the mouth of the small river at Kampung Kairatu. A sandbar, dry at LW, fronts the shore near the stream.

## Selat Ceram

**3.37 Selat Ceram** (3°28'S., 128°34'E.) is the wide and clear passage between Seram on the N, and Pulau Horuku and Pulau Saparua on the S. Because the points on both sides of the strait are conspicuous it can be easily navigated day or night. The N side is a low narrow plain with hills immediately behind it rising to a group of mountains, of which Gunung Toplana, a 1,346m peak, is the highest. Totaniwel, 1 mile SE of Toplana,

is a conical peak 1,260m high. The current in the strait is not strong and usually runs to the W.

The only anchorage out of the current is in Teluk Tuhaha on the N side of Pulau Saparua and which has previously been described in paragraph 3.35. Although the bottom is very steep, anchorage may be found off the villages of **Kampung Seruawan** (3°26'S., 128°25'E.), **Kampung Tohulala** (Tihoeale) (3°27'S., 128°31'E.), and **Kampung Rumakai** (Roemakan) (3°27'S., 128°32'E.), on the Seram side of the strait. The bottom is steep and a 0.9m shoal is off the latter village.

## South Coast of Seram (Continued)

**3.38 Teluk Elpaputih** (Elpapoetih) (3°17'S., 128°51'E.) is nearly 15 miles wide between its two entrance points Tanjung Latu (3°25'S., 128°42'E.) and **Tanjung Ailusiha** (3°21'S., 128°56'E.). Both of these points are low but the latter has a conspicuous group of tall trees on it, and a low tongue of land ending in Tanjung Kuako, extends NW from it. The mountains and hills are rather close to the W shore. Here Pohon Batu, a 383m summit with a small distinctive tree on the SW side of a wide ridge and Batu Mani, a 652m table mountain 6 miles farther N, are most conspicuous. The inner end and E side of the bay are bordered by an alluvial plain covered with bamboo trees. Hot springs are found in many places around the bay. Earth tremors occur frequently.

**Tides—Currents.**—In front of the bay and along the coast to the E a monsoon drift will be experienced, although it is not as strong as out in the open part of the Banda Sea. A countercurrent may be running along the coast.

**Anchorage.**—In general, the bottom is too steep in front of the villages to serve as anchorage. Exceptions to this are Teluk Meruru, an indentation at the W end of the bay, and off the villages of Kampung Makariki and Kampung Hururu (Hoeroeroe), on the E coast. A landing can usually be made during the NW monsoon, but during the SE monsoon the surf is generally so heavy that small-craft traffic between the villages is impossible. On the W shore, close NE of Pohon Batu, is a large settlement consisting of the villages of Kampung Paulohi, Kampung Mani, and **Kampung Samasuru** (3°16'S., 128°46'E.). At Kampung Waija, on the N shore, there is a coffee and cacao plantation which can be recognized by a tin roof.

**Teluk Amahai** (3°20'S., 128°55'E.), directly N of the E entrance point to Teluk Elpaputih, is formed by the tongue of land Tanjung Kuako. Although this point serves as a breakwater, the sea may be choppy occasionally. Other than that, and except for heavy afternoon showers that may come up during the NW monsoon, the bay is well sheltered. Reefs with depths less than 1.8m, extend up to 0.5 mile from the E shore. Between these reefs and the W shore there is anchorage in depths of 10.9 to 29m.

Two mooring buoys are about 0.5 mile SE of Tanjung Kuako.

**3.39 Amahai** (3°20'S., 128°55'E.) (World Port Index No. 52700), at the head of Teluk Amahai, is the residence of a government official. A pier for boats with a depth of 2.4m

alongside extends from the shore abreast the village; the pier was reported in ruins. A light is exhibited from the root of the pier and a flagstaff is close S.

Between Teluk Elapaputih and Teluk Teluti, about 39 miles E, the land along the coast becomes much higher to the E, but there are no conspicuous summits. A conspicuous tree stands on a 202m elevation 8.5 miles E of Tanjung Ailusha and 2.5 miles farther E is a conspicuous mosque in the village of **Kampung Sepa** (3°21'S., 129°07'E.), NW of Tanjung Oepa. Between **Kampung Tamilaœ** (3°23'S., 129°12'E.), 4.5 miles E of Tanjung Upa, and the W point of Teluk Teluti, the coast is fronted by many reefs; some of which, at the E end of this stretch, dry at LW. There is a heavy surf on this coast during the SE monsoon. This surf, in conjunction with the earth tremors, causes portions of the foreshore to break away.

**Teluk Teluti** (Teluk Taluti) (3°24'S., 129°45'E.) is about 24.5 miles wide between its two entrance points **Tanjung Seitu** (Seitoe) (3°26'S., 129°34'E.) and **Tanjung Mataia** (3°26'S., 129°58'E.). The former is low, but the land behind it rises steeply; the latter is also low and has a plain in back of it. High mountains surround the bay.

Waja, 790m high, is the highest summit of the wide and steep tongue of land forming the W side of the bay. Gunung Binaija, a 3,055m peak and the highest part of Seram, is NW of the bay. Pegunungan Manusela (Manoesela), a range of mountains on the N part of the bay, form a range extending E from Gunung Binaija. In contrast to the W side, the N side has a low narrow coastal plain which becomes wider in the valley of the river, **Wai Bobot** (3°23'S., 129°58'E.), on the E side.

**Anchorage.**—The principal villages in the bay are Kampung Tehoru (Tehoea), Kampung Wolu (Woloe), Kampung Laimu (Laimoe), and Kampung Bemu (Bemoe). Anchorage can be found in several places close to the shore. Kampung Tehua is not approachable during the SE monsoon. The wide rivers such as Wai Lau, Wai Kaba, and Wai Bobot can be navigated only by small craft for short distances above the mouth.

**3.40 Tehoru Roads** (3°22'S., 129°32'E.), on the W side of the bay, is a suitable anchorage during the NW monsoon, but less so during the SE monsoon. Anchorage can be found in a depth of 20.1m, over sand and mud, with the flagpole bearing 140° and 0.15 mile distant. There is also anchorage about 183m offshore with a stern line to the beach and the mosque bearing about 135°.

Between Teluk Teluti and **Tanjung Undur** (Oendoer) (3°47'S., 130°36'E.), about 44 miles E, the mountains and hills are not very conspicuous. Exceptions are Watu Lus (Watoe Loes), 506m high, and the double top of Oson, 853m high, which is back of Watu Lus and 19.5 miles ESE of Tanjung Mataia. East of Tanjung Undur, the mountains are more conspicuous. The W most and one of the highest of the group is 723m high and is visible for a great distance to the S and SW; its sides are partly bare. When seen from the W it appears to have a flat top. The other mountains of this group are well wooded.

Detached shoals become more numerous and the drying shore reef becomes more apparent toward the SE point of Seram.

**Tides—Currents.**—There is little or no current close to the coast, but further outside the monsoon drift will be encountered, although it is weaker than that farther out in the Banda Sea.

**Anchorage.**—There are many bights along this coast. The villages can be located by the coconut plantations near them. During the W monsoon and the turning periods, anchorage can be found almost anywhere. Reefs can only be distinguished at a short distance by discoloration.

**Kisalaut Roads** (Kisalaœ Roads) (3°36'S., 130°19'E.), 24 miles SE of Tanjung Mataia, affords anchorage in 16.4m over sand abreast of the village.

Near Tanjung Ultotin, 2 miles farther E, there is temporary anchorage in a depth of 16.4m in the vicinity of a loading place for lumber. Vessels call here occasionally.

**Kilmuri Roads** (Kilmoeri Roads) (3°40'S., 130°27'E.), about 2 miles NW of the village of the same name and 6.5 miles SE of Tanjung Ultotin, affords anchorage in depths of 10 to 20.1m over sand between the shore and two reefs with depths of 1.2 and 3.9m. On the shore abreast of the roads in the village of Selor.

**Undur Roads** (3°47'S., 130°36'E.), NW of the point of the same name, affords anchorage in 35m between the shore and a 6.7m shoal.

**Teri** (3°47'S., 130°43'E.), 722m high and standing 7 miles E of Tanjung Undur, is a steep dome with partly barren sides. From W it appears as a flat summit; from E the E side appears highest. It can be identified from a great distance. Suru and Tunlean, two peaks located E of Tori, have been previously described in paragraph 3.24.

**Pulau Gofa** (3°50'S., 130°43'E.), a small low islet covered with coconut trees and 7.5 miles SE of Tanjung Undur, has anchorage to the E in 20.1m. To approach this anchorage steer for Teri on a 354° bearing until Pulau Gofa is abeam. Smaller vessels can then proceed more to the E and anchor between Tanjung Aran and a 6.7m shoal 1 mile S of it. Local knowledge is necessary. During the NW monsoon anchorage may be obtained in most places off this coast; the reefs are marked by discoloration and can be seen from a short distance.

**Kampung Guli Guli** (Goeli Goeli), on the coast 3.5 miles E of Pulau Gofa, can be reached by small craft through a channel in the drying reef.

The SE point of Seram is a low marshy peninsula with many creeks and it is surrounded by a wide drying reef. The point is more easily identified by the string of reefs and islands extending E from it than by the mountains to the NW. Four channels lead in a N-S direction through these reefs.

## Islands Southeast of Seram

**3.41 Tides—Currents.**—Strong tidal currents, which may attain a velocity of 3 knots at springs, run through the above channels. They set S with the ebb and N with the flood. At Geser it has been noted that the S currents set in two hours after HW at full and new moon, and 1 hour after HW at quarter points. In Selat Kefing they are accompanied by tide rips which render navigation difficult. Winds blowing in the opposite direction to the current sometimes cause a heavy sea. At the E end of the string of reefs and on the N side of Kepulauan

Gorong the currents are strong and variable and cause violent tide rips. In the strait between the reefs and the W most of Kepulauan Gorong it was noticed that the current set diagonally across toward the reefs on a rising tide.

**Pulau Seram Rei** (Pulau Ceram Rei) (3°52'S., 130°51'E.), on a drying reef extending E from the SE point of Seram, is a small low island covered with tall trees and surrounded by a white sandy beach which is submerged at HW. There are also several trees on the drying reef between this island and the SE point of Seram.

**Geser** (3°53'S., 130°54'E.), a small flat island on a drying reef 1.6 mile E of Pulau Seram Rei, is covered with trees. It is separated from the other reefs by two straits, Selat Kefing on the W side and Selat Kilwaru (Kilwaroe) on the E side.

A 9.1m shoal is on the W side of the S entrance to Selat Kefing and a 7m shoal is on the W side, 0.85 mile SW of the S end of Geser.

**Caution.**—See Pub. 120, Sailing Directions (Planning Guide) Pacific Ocean and Southeast Asia, for danger area and swept channel information in Selat Kilwaru.

**Geser Roads** (3°53'S., 130°54'E.), in Selat Kilwaru on the E side of Geser island, affords anchorage abreast the boat pier in about 9.1m. It is inadvisable for more than one vessel to anchor in the roads at the same time. The holding ground is not good because the bottom is smooth stones. A choppy sea may be experienced when the wind and the current are in opposition. When the currents are strong and the sea is rough better anchorage may be found in the N entrance to the strait.

Selat Kilwaru is marked by beacons; those on the W side of the channel are black and those on the E are white.

The E side of Selat Kefing is marked by a beacon with a square topmark close N of the N end of the drying reef on which Geser is located and by another beacon with a truncated cone topmark on the SW edge of the same reef.

**Tides—Currents.**—At Geser the lowest LW level occurs in June or July and in December or January. The maximum rise and fall of tide that can be expected are, respectively, about 0.7m above and 1.2m below mean sea level.

Current signals are occasionally shown from the mast at the head of the boat pier at Geser. A red flag indicates N current, a white flag slack water, and a blue flag a S current.

**Directions.**—Because it is not desirable to anchor with the current setting in the same direction that the vessel is heading, it is advisable to enter Selat Kilwaru against the current.

When coming from the S steer for the conspicuous summit of Pulau Seram Laut on a 056° bearing until the S beacon on **Pulau Kilwaru** (3°53'S., 130°54'E.), a low island about 0.5 mile ENE of Pulau Geser, is bearing about 020° (this beacon is reported difficult to identify sometimes), then alter course northward and be guided by the beacons to the anchorage.

When coming from N, stand in for Selat Kefing until the NE point of Pulau Geser is in range with the SW side of Pulau Seram Laut, then steer for Selat Kilwaru and proceed to anchor with the aid of the beacons.

The beacon, topmarked with a black truncated cone, on the NE end of the reef extending from Pulau Geser is very difficult to see when approaching from E.

**Geser** (3°53'S., 130°54'E.) (World Port Index No. 52690) is on the island of the same name. The village is on both sides of a lagoon, the entrance of which is crossed by a bridge. A pier is on the N side of the entrance to the lagoon and there is a 75m long stone mole on the N side of the village. A government official has headquarters here. Forest produce and copra are exported. A light is shown from a flagpole on the outer end of the pier when vessels are expected.

**Pulau Seram Laut** (Pulau Ceram Laoet) (3°53'S., 130°26'E.), the largest island on the string of reefs extending 22 miles E of the SE end of Seram, is rocky and largely covered with coconut trees. In the middle it is about 90m high. Kilwaru and Marlau, islands off the NW side and E end, respectively, are both low. Of the other islets on the reef to the east, Kifar, Kidang, Nukus, Grogus, and Pulau Koon are the largest and are covered with coconut trees. The remainder are mainly small wooded rocky formations. There are passages through the reefs 1 and 7 miles E of Pulau Seram Laut, but these are not marked with navigational aids and are not recommended.

## Kepulauan Gorong

**3.42 Kepulauan Gorong** (4°03'S., 131°20'E.), a group of islands 22.5 to 38 miles ESE of the SE point of Seram consists of Pulau Panjang, Pulau Manawoka, and Pulau Gorong. The first two are connected by a bank of soundings of less than 183m, but a deep-sea passage separates these two from Pulau Gorong. There are no detached dangers far beyond the fringing reef, except on both sides of the N part of Pulau Gorong where they extend up to 1 mile off. Valuable woods are cultivated on all of these islands and praus are built. Natives are engaged in coconut and sago culture and fishing.

**Tides—Currents.**—Currents have been observed to set N with a rising tide and S with a falling tide. South of Pulau Manawoka the latter current draws to the SSW, so that it sets across the strait between Kepulauan Gorong and Kepulauan Watubela to the S. At full moon it may attain a velocity of 2.5 knots. Strong tide rips occur in places.

**Pulau Panjang** (Pulau Pandjang) (4°01'S., 131°14'E.), the NW island, is lower than the other two, rising to a height of 100m. The villages are small and in places built on poles on the reefs. The coastline on the S and SW side is rocky but has several short sandy beaches. The S part of the E side is covered with mangrove trees. The entire island is heavily wooded and there are some scattered coconut plantations. There is no anchorage near this island. The passage between Pulau Panjang and Pulau Koon, to the N, is clear of dangers, but there are violent currents and cross currents setting toward the Pulau Koon reef on the flood.

**3.43 Pulau Manawoka** (4°07'S., 131°20'E.), SE of Pulau Panjang, is the highest mountain in the group and rises to a height of 359m in Lololi, which resembles a table mountain but is more pointed when seen from N or S. The coast is alternately low and rocky. The W coast is almost uninhabited, but on the E coast there are several villages with large coconut plantations. Tidal currents set SSW with the falling tide S of the island at a rate of 2.5 knots at springs.

**Amar Roads** (4°05'S., 131°19'E.), on the NW side of Pulau Manawoka, affords suitable anchorage on or near the 11.9m bank N of the village, but the anchorage is not favorable at the height of the monsoons, especially the N monsoon, when a heavy sea may be experienced. Landing is difficult at that time. The village and its flagpole are hard to distinguish, but on the approach of a vessel the national flag is hoisted. On the drying reef E of the flagpole there are some large rocks which are covered only at the highest HW level.

**Pulau Gorong** (4°01'S., 131°24'E.), the E most island of the group, has a range of hills ranging up to 321m high at **Watu Keliang** (4°00'S., 131°24'E.). Generally the coasts are low and covered with coconut plantations. Tanjung Assan, the NW point, is rocky; Tanjung Namalen, the NE point, is sandy.

**Ondur Roads** (4°00'S., 131°23'E.), on the W side of Pulau Gorong, has a shore which is fronted by reefs and shoals up to 0.5 mile offshore, however, a navigable channel, marked by beacons, leads in a NE direction to the village. An outer shoal on the N side of the channel has a depth of 3.9m. Larger vessels may find anchorage in about 40m in the outer part of this channel. Local knowledge is necessary.

**Kailakat Roads** (4°03'S., 131°26'E.), near the S end of the E side of Pulau Gorong, is in a small bay with a sandy bottom over which the depths decrease uniformly to the head. The bay can be recognized by a red bare spot close S of the rocky entrance point. The spot is easily identified from the N, NE, or SE. Entrance can be safely made on a 265° bearing on the white bridge over the mouth of the stream S of the S most mosque. A 16m shoal lies 0.8 mile ESE of the village of Kailakat. Local knowledge is necessary for anchoring in this area.

## Kepulauan Banda

**3.44 Kepulauan Banda** (4°25'S., 129°55'E.), a group of islands about 65 miles SW of the SE end of Seram, are hilly and mountainous and separated from each other by deep passages. The only off-lying danger is Karang Saaru Arrungesi (Rif Van Rosengain) which is discussed in paragraph 3.46.

About June and September the sea for several miles around assumes a milky white appearance, as though a thin mist covers the surface. This is attributed to masses of microscopic organisms which float near the surface of the water.

Earthquakes occur very often and violent eruptions of Vuurberg Volcano on Pulau Gunung Api (Goenoeng Api), have been recorded.

Except for Pulau Suanggi all of the islands are inhabited. The inhabitants engage in fishing and coconut and nutmeg cultivation.

**Tides—Currents.**—Because the Banda Sea is subject to monsoon drifts, strong currents will be encountered in the passages between the islands; their velocity depends on the width of the passage. In the narrower channels of the main group of islands tidal currents dominate. Current rips will also be encountered.

**3.45 Pulau Suanggi** (Soeanggi) (4°19'S., 129°42'E.), the NW island and most isolated from the group, is a large rock 107m high, with almost vertical bare sides and a wooded top.

Except on the W side, a coast reef fringes the shores. A light is shown from the summit of the island.

**Pulau Run** (Roen) (4°33'S., 129°41'E.), 13 miles S of Pulau Suanggi, is 203m high at Gandulang Hill and has a coastal reef on all sides. Except for the steep slope at the SW point, the S slope of Gandulang Hill, and Run Hill near the N point, the land rises gradually. The small low islet of Nailaka is on a drying reef extending from the N end of the island.

Pulau Run is a good radar target at a distance of 18 miles.

**Anchorage.**—The only anchorage near Pulau Run is in a depth of 70m in a bight of the coastal reef between Nailaka and the E point of Pulau Run. This anchorage, however, is good only during the W monsoon.

**Pulau Ai** (4°32'S., 129°46'E.), 4.25 miles ENE of Pulau Run, is 145m high and is fringed by a drying reef on all sides. Generally the island is steep except for somewhat of a slope on the N side. When seen from a considerable distance it appears flat with the conspicuous and highest hill, Kota Perampuan, on the E side. The NE and NW points are high.

The sea bottom on the NE and S sides of the island are too steep for anchoring. On the W side, there is a small area where large vessels may find anchorage in a depth of 68m over sand and stones. It can be approached with the NW point of the island bearing 060° until the S side bears 128°. **Kampung Ai** (4°31'S., 129°46'E.), with the old Fort Revenge in its W part, is on the N side of the island.

**3.46 Pulau Banda Besar** (Groot Banda) (4°33'S., 129°55'E.), 10 miles E of Pulau Run, is fairly high. A chain of hills and small mountains runs through the entire length of the island. Bandera, a 536m mountain is the highest point, but it is not very conspicuous. Peri, a 176m hill, is the highest elevation of the tongue of land extending from the E end of the N side of the island. Generally there is very little drying coastal reef except of the N side of the W half of the island. Most of the villages are on the N side. **Kampung Lontor** (4°33'S., 129°52'E.), at the NW part of the island is built on the slopes of an old crater. A stairway of about 200 steps leads from a landing place to the village. The bays on the S side of the island are too deep for anchoring, and landing is difficult because of breakers. The island is a good radar target at a distance of 27 miles.

**Pulau Gunungapi** (Goenoeng Api) (4°31'S., 129°52'E.), close N of the W end of Pulau Banda Besar, is separated from that island by Lontor Channel (Gat Van Lontor), which is constricted by the reef extending N from Pulau Banda Besar. The island is almost entirely the volcano, Vuurberg, which rises to a height of 656m and has a bare upper part. Clouds of smoke and fumes rise continuously from the two craters and from crevices in the sides. On the NE side of the island is a small peninsula formed by the steep **Uluweru Hill** (4°31'S., 129°53'E.), which is 94m high. Only the W side of the island is free of drying reefs. With due precautions anchorage is available off the SW side of the island.

**3.47 Pulau Naira** (4°31'S., 129°54'E.), close E of Pulau Gunungapi, is not as hilly as the other islands but rises to 250m in Papenberg. It is separated from Pulau Gunungapi by Zonnegat, a channel whose N entrance is divided into two

channels by Kraka, an islet 26m high, where a light is shown from its N tip. The S entrance to Zonnegat is practically obstructed by a reef with greatest depths of 0.5 to 4.1m in a very narrow passage. Oostgat, the wide channel between Pulau Naira and Pisang, is deep and clear.

**Pisang Islet** (4°30'S., 129°56'E.), 66m high, is about 0.5 mile NNW of the N extremity of Pulau Banda Besar and is covered with coconut trees, except for a large conspicuous bare rock on its N point. **Batu Kapal** (4°29'S., 129°56'E.), a bare islet, is about 0.3 mile N of Pisang Islet. Passage between the two islets is not advised, but Selat Selamo, the passage between the N point of Pulau Banda Besar and Pisang Islet, is deep and clear of dangers, except for the 2.8m shoal extending 0.2 mile off the NW side of Tanjung Burang.

Pisang Islet has been reported to be a good radar target at a distance of 21 miles.

**Tides—Currents.**—Strong tidal currents set through the channels. In the roadstead S of Pulau Naira the current sets E during the flood and W with the ebb at the rate of up to 3 knots.

**3.48 Naira Roads** (4°32'S., 129°54'E.) consists of two parts, one S of Pulau Naira and the other in the S part of Zonnegat, on the W side of Pulau Naira, close NE of the SW extremity of the island. In the former anchorage is available in any desired depth over a bottom of sand, coral, and stones. The roads in Zonnegat are rather deep for anchoring, therefore, it is best to moor at the Government Pier. Squalls which come down off Pulau Gunungapi make it advisable to moor with the bow to the N and an anchor laid out ahead.

**Tides—Currents.**—At Naira Roads the lowest LW occurs in May or June and in November or December. The maximum rise and fall of tide that can be expected are, respectively, about 0.8m above and 1.3m below mean sea level.

**Aspect.**—A light is shown from a white metal framework tower at the head of the E pier when a vessel is expected or is in the roads S of Pulau Naira. Two lights are shown occasionally from the Government Pier in Zonnegat. A light is

also shown on the NW point of Pulau Naira, 0.3 mile E of Kraka.

**Directions.**—The approach from the N to the roads S of Pulau Naira is clear and should present no difficulty. Vessels approaching from W by way of Lontor Channel (Gat Van Lontor) will find the passage rather narrow, and the N side of this channel should be favored. There is a least depth of 7.8m in the fairway.

Vessels bound for the road in Zonnegat can pass either W or E of Kraka. To pass W of the islet steer for a village on the W side of Naira 0.9 miles SE of Kraka, bearing 121° and open NE of Pulau Vera, the NE point of Gunungapi; this will lead over the bar SW of Kraka with a least depth of 11.9m. The shoals on the starboard hand are usually marked by discoloration. To pass E of Kraka Islet bring the S end of the **Government Pier** (3°32'S., 129°53.5'E.) in range with Pulau Vera. This will lead in midchannel through a least depth of 13.7m.

**Kampung Naira** (4°32'S., 129°54'E.) (World Port Index No. 52780), is on the SW side of Pulau Naira. There are two piers on drying reefs on the S side of Pulau Naira and a Government Pier on the Zonnegat side with depths of 4.5 to 7.9m alongside. There are two old forts, Belgica and Nassau, in the village.

**3.49 Pulau Rozengain** (4°35'S., 130°02'E.), about 5 miles ESE of Pulau Banda Besar, is fringed by a drying shore reef marked by discoloration, except for a part on its SW side. It has two hills of which Lari, the N one, is 171m high and wooded. Kota Batu Merah, the S one, is 170m high, bare, and conspicuous. Two large rocks are on the coastal reef, one on either side of Tanjung Pulu the NE point of the island. The only village on the island is near a small sandy beach on the N side. There is no anchorage near the island.

**Karang Saaru Arrungesi** (Rif Van Rozengain) (4°38'S., 130°03'E.), 2 miles SSE of Pulau Rozengain, dries about 0.9m at LW springs on its N part. It is always marked by heavy breakers. There is no anchorage in the vicinity.